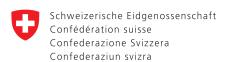


Vocational and Professional Education and Training in Switzerland

## **Facts and Figures 2018**



Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER State Secretariat for Education, Research and Innovation SERI



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### Overview

The Swiss VPET system enables young people to enter the labour market and ensures that there are enough skilled workers and managers in the future. It has a high labour market relevance and is an integral part of the education system. The VPET system is divided into two sectors: upper-secondary level vocational education and training (VET) and tertiary-level professional education.

### The most popular form of upper-secondary level education and training

Two-thirds of all young people coming out of compulsory education in Switzerland enrol in vocational education and training (VET), which provides them with a solid foundation in a given occupation. There are around 230 occupations to choose from. The VET sector forms the basis for lifelong learning and opens up a wealth of job prospects.

⇒ More information on pages 11–15.

#### **Career prospects**

Tertiary-level professional education builds from uppersecondary level vocational education and training (VET). It provides professionals with specific competences and prepares them for highly technical and managerial positions. There are around 400 federal examinations as well as 57 study programmes at colleges of higher education in 8 different professional fields.

The Federal Vocational Baccalaureate (FVB) opens the way to Swiss universities of applied sciences (UAS). FVB holders who pass the University Aptitude Test (UAT) have the option of enrolling in a cantonal university or one of Switzerland's two federal institutes of technology (FIT). 

⇒ More information on pages 16–21.

#### **Dual-track approach to learning**

Most VET programmes are of the dual-track variety (i.e. part-time classroom instruction at a vocational school combined with a part-time apprenticeship at a host company). The less common variety is a school-based VET programme (i.e. full-time classroom instruction, no apprenticeship). School-based VET programmes are generally offered by trade schools or commercial schools. Tertiary-level professional education also combines classroom

instruction with work-based training, thereby ensuring a smooth transition from dual-track VET programmes. 

⇒ More information on page 10.

#### **Permeability**

The Swiss VPET system is based on clearly defined education and training options as well as on national qualifications procedures. Typically, VET and professional education are very flexible: learners may pursue more advanced education and training opportunities, switch from vocational/professional pathways to general education/university pathways and later change the course of their working lives with relative ease. Continuing education and training (CET) options are also available at all levels.

⇒ More information on pages 6–7 and 22.

#### **Labour-market focus**

Education and training are centred on acquisition of professional competences that are actually in demand as well as on occupations and professions for which there are existing job vacancies. This direct link with the labour market is the main reason why Switzerland has one of the lowest youth unemployment rates in Europe.

 $\Rightarrow$  More information on pages 10, 12 and 15.

#### **Collective governance**

The VPET system is collectively governed by the Confederation, the cantons and professional organisations. These three main partners work together to maintain a high level of quality within the VPET system. They also strive to ensure that there is an adequate supply of apprentice-ship/traineeship positions and training options. This partnership and respective areas of responsibility are set forth in the Federal Vocational and Professional Education and Training Act (VPETA) and its corresponding ordinance. 

⇒ More information on pages 8–9.



#### Quality

The main purpose of having all three partners involved is to ensure high quality within the VPET system. The distribution of training content across two (or in some cases three) different learning locations – i.e. vocational schools, host companies and branch training centres – helps to improve the quality of upper-secondary level VET programmes. The responsibilities of each actor depend on the tasks assigned to each of the three main partners within the VPET system. In areas where responsibilities overlap, the actors work together on the specific situations and matters at hand.

⇒ More information on pages 8–9.

#### **Efficiency**

The consistent focus on the labour market allows VET programmes to be efficiently and effectively organised. One indication of this is the fact that the productive output of learners during their apprenticeships exceeds the gross costs of their training.

⇒ More information on pages 23–25.

#### Diversity

With apprenticeships and professional qualifications offered in a wide range of occupations, VPET has something for everyone, no matter their interests or abilities. There are various careers advice services available, providing support in particular to young people about to begin or already doing an apprenticeship.

⇒ More information on page 13.

#### Completion rates for 2016<sup>1</sup>

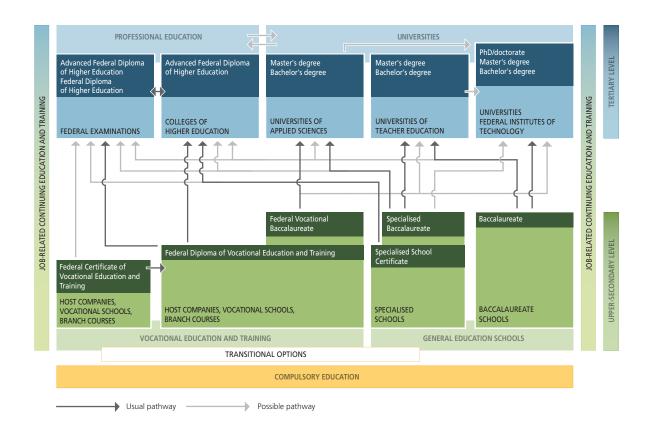
Upper-secondary level: vocational education and training (VET)	Total	Women	Men
Federal VET Diploma	62 762	28446	34316
Federal VET Certificate	6253	2939	3314
Non-formal two-year apprenticeships	134	12	122
Federal Vocational Baccalaureate	14397	6747	7 650
University Aptitude Test	959	426	533
Tertiary level: professional education	Total	Women	Men
Qualification awarded by colleges of higher education	8470	4078	4392
Advanced Federal Diploma of Higher Education	3473	1287	2 186
Federal Diploma of Higher Education	14402	5 4 5 7	8945
Professional education not recognised by the Confederation	396	280	116

<sup>&</sup>lt;sup>1</sup> Federal Statistical Office (2017a). These figures refer to the number of qualifications awarded, not the number of holders (some of whom may hold several qualifications).



### Swiss VPET system

Vocational education and training (VET) is provided at upper-secondary level. Professional education is provided at tertiary level. Both VET and professional education use clearly defined curricula and national qualification procedures. They are also characterised by a high degree of permeability: recognition of prior learning to keep track of prior education and training makes it much easier for learners to pursue further education and training opportunities, switch between vocational/professional pathways and general education/university pathways and change the course of their working lives. The Swiss VPET system offers a broad selection of available training options. Courses cater to different abilities and are geared to the needs of different age groups. A wealth of job-related continuing education and training (CET) courses can also be found at all levels.





### Upper-secondary level: vocational education and training (VET)

VET programmes provide learners with solid professional competences and pave the way for lifelong learning. 

⇒ More information on pages 11–17.

### Three-year or four-year VET programmes for the Federal VET Diploma

These VET programmes provide learners with the competences needed to work in a specific occupation and open access to tertiary-level professional education. Learners also have the option of preparing for the Federal Vocational Baccalaureate (FVB) either during their training or after qualifying.

### Two-year VET programmes for the Federal VET Certificate

These VET programmes provide young people with more practical skills to obtain a recognised qualification for a specific occupational profile. Graduates of a two-year VET programme may enrol directly in a three- or four-year VET programme leading to the Federal VET Diploma.

#### Federal Vocational Baccalaureate (FVB)

Learners enrolled in a three-year or four-year VET programme for the Federal VET Diploma have the option of preparing for the Federal Vocational Baccalaureate (FVB). This preparatory course covers general education subjects and those who pass the FVB examination may enrol in a Swiss university of applied sciences (UAS) without having to take an entrance examination. Moreover, holders of the FVB can prepare for the University Aptitude Test (UAT), which opens the way for enrolment in a cantonal university or federal institute of technology.

#### Transitional options between lower- and uppersecondary level

Transitional options are available to young people completing compulsory education who have been unable to immediately transition to upper-secondary level. Such options include practical training and pre-apprenticeships and are generally designed to prepare young people for enrolment in VET programmes.

#### **Tertiary level: professional education**

Holders of the Federal VET Diploma or equivalent qualifications may specialise or deepen their expertise at tertiary level by pursuing a professional qualification. Preparation also includes acquisition of managerial skills. The professional education sector is designed to meet the needs of the labour market and builds on existing work experience.

⇒ More information on pages 18–21.

#### Federal examinations (level 1)

This federal examination is intended for professionals who wish to improve their knowledge and skills and specialise in a given field after completing upper-secondary level vocational education and training (VET). Successful candidates are awarded the Federal Diploma of Higher Education, which is generally a prerequisite for admittance to the examination for the Advanced Federal Diploma of Higher Education.

#### Federal examinations (level 2)

This examination is generally for professionals who have acquired a great deal of expertise in their field and/ or who intend to hold a managerial position in a company. Successful candidates are awarded the Advanced Federal Diploma of Higher Education.

#### Study programmes at colleges of higher education

Study programmes at colleges of higher education are intended for professionals holding a Federal VET Diploma or equivalent qualifications who wish to improve their knowledge and skills and hold managerial positions. These degree programmes cover a broader and more general range of topics than those addressed in the two federal examinations described above. Successful candidates are awarded a federally recognised qualification.

#### Job-related continuing education and training (CET)

A wide range of job-related CET options (i.e. non-formal courses, seminars, etc.) can be found at all training levels and are part of lifelong learning.



### One mission – three partners

The provision of VET and professional education is a mission collectively shouldered by the Confederation, the cantons and professional organisations. These three partners are jointly committed to the highest possible standard of quality within the Swiss VPET system. They also strive to ensure the availability of an adequate number of apprenticeships and training courses.

#### Confederation

### State Secretariat for Education, Research and Innovation (SERI)

SERI is the federal government's specialised agency for national and international matters concerning education, research and innovation policy. SERI is responsible for regulating and co-funding the VET and professional education sectors.

⇒ www.sbfi.admin.ch

### Swiss Federal Institute for Vocational Education and Training (SFIVET)

SFIVET provides basic and continuing training to teachers, trainers, instructors and examiners working at both upper-secondary level (VET sector) and tertiary level (professional education sector). SFIVET is also involved in research, studies, pilot projects and the provision of services. It has three regional campuses: in Lausanne, Lugano and Zollikofen.

⇒ www.ehb-schweiz.ch

#### Confederation

#### Strategic management and development

- Providing quality assurance and further development of the Swiss VPET system
- Ensuring comparability and transparency of courses throughout Switzerland
- Enacting around 230 VET ordinances
- Recognising regulations for around 400 federal examinations as well as 35 core syllabuses for study programmes at colleges of higher education
- Recognising study programmes and continuing education and training at colleges of higher education
- Recognising training courses for teachers, trainers, instructors and examiners within the VET and professional education sectors as well as training courses for vocational, educational and career guidance counsellors
- Recognising foreign qualifications
- Providing one fourth of public sector expenditure for the VPET system
- Promoting innovation and support for specific activities in the public interest



#### **Professional organisations**

#### Training content and apprenticeships

- Establishing the training content of VET programmes and study programmes at colleges of higher education
- Establishing national qualification procedures for VET programmes as well as for federal examinations for the Federal Diploma of Higher Education and the Advanced Federal Diploma of Higher Education
- Creating apprenticeship positions
- Imparting professional competences at tertiary level (professional education)
- Developing new training courses
- Organising branch courses
- Managing VPET funds

#### **Professional organisations**

#### Trade associations / branch organisations

These determine the content of training and national qualification procedures, and organise courses at upper-secondary level (VET sector) and tertiary level (professional education sector).

### Social partners, other relevant organisations and VPET providers

Together with trade associations, they are also involved in the further development of VPET.

#### Companies

Where possible, companies provide apprenticeships and traineeships, thereby paving the way for the next generation of qualified workers. Their involvement in the Swiss VPET system is voluntary.

#### **Cantons**

#### Implementation and supervision

- Implementing the Federal Vocational and Professional Education and Training Act (VPETA)
- Supervising apprenticeships, vocational schools and colleges of higher education
- Providing vocational, educational and career guidance services
- Creating options that prepare young people for enrolment in VET programmes
- Issuing permits authorising host companies to take on apprentices and/or trainees
- Apprenticeship marketing
- Providing training to apprenticeship trainers in host companies

#### **Cantons**

#### Swiss Conference of Cantonal Ministers of Education (EDK)

#### 26 cantonal VET offices

Responsible for implementing VET at cantonal level, VET offices coordinate their activities through the Swiss Conference of VET Offices (SBBK), a specialised conference of the Swiss Conference of Cantonal Ministers of Education (EDK).

⇒ www.sbbk.ch

### Vocational, educational and career guidance services

These provide information and advice to both young people and adults.

#### **Vocational schools**

Vocational schools provide classroom instruction for both dual-track (i.e. combined work and school) and school-based (i.e. full-time classroom instruction, no apprenticeship) VET programmes. They also prepare learners for the Federal Vocational Baccalaureate examination.



### Learning locations

The trademark and strength of the Swiss VPET system is the direct correlation with the labour market. This is reflected in various learning locations.

### Upper-secondary level: vocational education and training (VET)

#### Apprenticeship training at host companies

With the dual-track approach, learners attend courses at vocational schools on a part-time basis. The remaining time is spent doing an apprenticeship at a host company where they are provided with the practical know-how, knowledge and skills needed for their chosen occupation. Learners also actively take part in the host company's production processes. Host company networks: in some cases, host companies may wish to combine their strengths to offer one or more apprenticeships in a modular format.

#### Classroom instruction at vocational schools

Vocational schools provide classroom instruction. This consists of instruction in vocational subjects as well as subjects falling under the Language, Communication and Society (LCS) category. Classroom instruction is intended to develop the technical, methodological and social skills of learners while imparting the theoretical and general principles needed to perform occupational tasks. Classroom instruction covers one or two days per week. Vocational schools also offer a preparatory course for the Federal Vocational Baccalaureate Examination.

#### Branch courses at branch training centres

Branch courses are meant to complement classroom instruction at vocational schools and apprenticeship training at host companies by providing learners with essential practical skills. Branch courses often take place at third-party training centres run by the branches involved.

#### Tertiary level: professional education

#### **Preparation for federal examinations**

Preparation for federal examinations for the Federal Diploma of Higher Education and Advanced Federal Diploma of Higher Education takes place alongside one's usual working activities. Although there is no requirement to do so, candidates for federal examinations may enrol in part-time preparatory courses, which are offered by public and private providers in the evenings or at weekends.

#### Study programmes at colleges of higher education

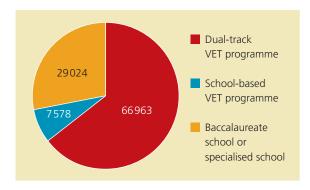
Study programmes at colleges of higher education may be attended on either a full-time or part-time basis. Students enrolled in the full-time programme complete internships over the course of their studies. In order to enrol part-time, students must be employed at least 50% of a standard workweek. The aim is to apply what one learns in an actual working environment.



### Vocational education and training

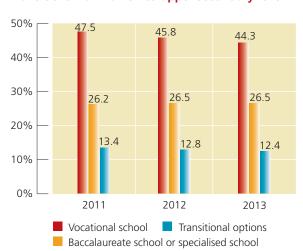
Vocational education and training provides young people with their first exposure to working life. It is the basis for lifelong learning and opens a wide range of career prospects.

#### Enrolment in upper-secondary level in 2015<sup>2</sup>



Around two-thirds of young people coming out of compulsory education in Switzerland enrol in an upper-secondary level VET programme. This proportion has remained constant for years. Dual-track VET programmes are by far the most prevalent form of vocational education and training. In the French- and Italian-speaking regions of Switzerland, however, there is a marked preference for school-based VET programmes compared to the German-speaking region: in 2015, only 4.5% of all VET programmes in the German-speaking region were school-based, whereas in the French-speaking region the proportion stood at 24.8% and in the Italian-speaking region at 25.8%.<sup>3</sup>

#### Transitions from lower- to upper-secondary level<sup>4</sup>



The vast majority of pupils coming out of compulsory education, enrol in either a vocational school (VET sector) or in a baccalaureate school or a specialised school (general education sector). Many young people who were unable to transition directly to upper-secondary level opted for a transitional option such as a 10th school year or a preparatory course for VET. Others went on a motivation semester or spent time abroad to improve their language skills.

<sup>&</sup>lt;sup>2</sup> Federal Statistical Office (2017d). Dual-track and school-based VET programmes, incl. trade schools and IT schools, excl. non-formal two year apprenticeships.

<sup>&</sup>lt;sup>3</sup> Federal Statistical Office (2017d). incl. trade schools and IT schools, excl. non-formal two-year apprenticeships.

<sup>&</sup>lt;sup>4</sup> Federal Statistical Office (2017c), (2017d). VET, incl. non-formal two-year apprenticeships. General education includes baccalaureate schools, specialised schools and schools that prepare learners for the specialised baccalaureate. Transitional options include the 10th school year, pre-apprenticeships and schools that prepare young people for enrolment in VET.



#### Apprenticeship market

There are two sides to the apprenticeship market: the supply side (host companies offering apprenticeship positions) and the demand side (young people looking for apprenticeship positions). The State plays a mediating role: it ensures the best possible general conditions for host companies, encourages the provision of apprenticeship positions and helps young people to choose an occupation company. Various factors influence supply and demand on the apprenticeship market. On the supply side are structural changes, economic fluctuations and the host company ratio (i.e. proportion of companies that are willing and able to train apprentices). On the demand side, demographic changes and the interests of young people have an impact on the apprenticeship market.

#### Transitions «Barometer»

The Transitions «Barometer» provides quick updates on the current situation and development trends following compulsory edcations. Representative surveys are conducted among companies and young people to identify and monitor key indicators of the present situation.

⇒ www.sbfi.admin.ch/barometer

#### Structural changes

The supply of apprenticeship positions reflects the long-term needs of the labour market.

#### **Economic fluctuations**

Economic fluctuations affect the order book of host companies and therefore their ability to productively employ apprentices.

### Apprenticeship market

#### Host company ratio

Around 40% of the companies in Switzerland that could offer apprenticeships actually do so. Smaller companies in particular are either overly specialised or lack qualified apprenticeship trainers, which makes it more difficult for them to offer apprenticeships.

#### Demographic changes

Demographic changes affect the number of young people completing compulsory education, which in turn affects demand.

#### Interests of young people

The choice of occupation depends on the hopes, aspirations and aptitudes of learners as well as the availability of suitable apprenticeship positions. Career guidance services provide young people with information and advice.



### Focus on young people: advice and support before and during training

#### Vocational information and counselling

Cantonal career guidance services work closely with schools to help young people choose an occupation and find a suitable apprenticeship.

⇒ www.adressen.sdbb.ch

#### List of apprenticeship positions

The list of apprenticeship positions enables young people to search all open apprenticeships by occupation and canton.

⇒ www.berufsberatung.ch ⇒ Lehrstellensuche

#### **Transitional options**

Transitional options are intended for young people who are not yet able to enrol in a VET programme for social or scholastic reasons or who have been unable to find an apprenticeship. In addition to courses aimed at improving scholastic, linguistic or other skills, young people attend a course to prepare them for enrolment in a VET programme. The acquired skills increase their chances of finding an apprenticeship.

#### Coaching and mentoring

Coaching and mentoring entails the provision of individual guidance to young people during the period of compulsory education. One of the aims is to help young people to improve occupational and social skills and optimise their CVs. The various projects and programmes are sponsored by both the cantons and private organisations.

#### **VET Case Management**

VET Case Management is intended to help young people, who are particularly at risk of dropping out of VET programmes. The aim is also to improve the efficiency and effectiveness of measures taken. VET Case Management is a structured process: a case manager coordinates institutional activities in accordance with an established plan so as to ensure that the young person receives adequate support.

⇒ www.sbfi.admin.ch/cmbb

#### Apprenticeship placement services

Apprenticeship placement services are available to young people in the fourth quarter of the last year of lower-secondary school. The aim is to further assist young people in their efforts to find an apprenticeship position.

#### Individual guidance

Individual guidance is for young people who encounter learning difficulties. They receive comprehensive support involving the host company, the vocational school, the branch training centre and social surroundings. Learners enrolled in two-year VET programmes are legally entitled to individual support and guidance. However, learners enrolled in three- or four-year VET programmes may also make use of these services.

### Focus on companies: creation of apprenticeship positions

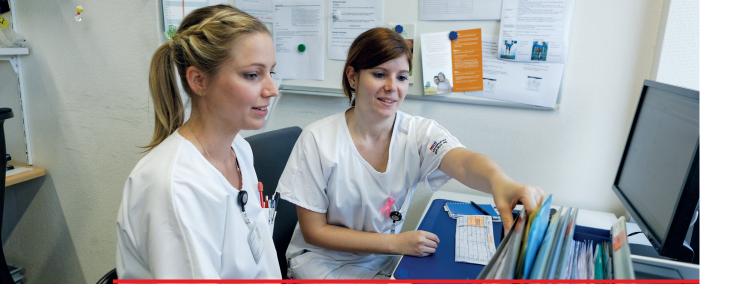
#### Host company networks

The creation of host company networks enables smallsized or specialised companies to pool their resources with other companies. Instead of providing the full range of apprenticeship training as a single company, each partner provides a portion thereof.

⇒ www.lbv.berufsbildung.ch

#### Marketing of apprenticeship positions

Cantonal VPET offices are familiar with the conditions in the various regions. They maintain contact with local companies. Apprenticeship promoters contact companies directly to encourage them to create apprenticeship positions and become involved in training apprentices.



#### The ten most frequently chosen occupations<sup>5</sup>

Occupations	Total
Commercial employee (all profiles)	14280
Retail clerk	4983
Health care worker	4563
Social care worker	3493
IT technician	2087
Electrician	1996
Logistician	1732
Cook	1626
Draughtsman	1536
Retail assistant	1524

In Switzerland, there are VET programmes for around 230 different occupations. The ten most popular occupations in 2016 account for over 50% of all newly signed apprenticeship contracts.

#### Links

List of federally recognised vocational and professional qualifications:

⇒ www.bvz.admin.ch

#### **Enrolment in VET programme:**

⇒ www.education-stat.admin.ch ⇒ Personen in 

#### Apprentice satisfaction with choice of occupation<sup>6</sup>



Found apprenticeship in another occupation VET was second choice

Other / Don't know / No information

The choice of occupation and search for an available apprenticeship are important processes. Pupils begin this process during compulsory education when they are between the ages 13 and 16. Over 70% of all young people who enrolled in a VET programme in 2017 managed to find an apprenticeship that matched their desired occupation. This proportion has remained constant over the years.

Portal for vocational, educational and career guidance services:

⇒ www.berufsberatung.ch

<sup>&</sup>lt;sup>5</sup> Federal Statistical Office (2017i), including school-based programmes

<sup>&</sup>lt;sup>6</sup> Link Institute (2017).



#### Creation of a VET programme - An example of cooperation between three main partners

In Switzerland, VET programmes are developed by the private sector, i.e. the professional organisations that represent the interests of economic branches. Every five years, the training content and structure of VET programmes are evaluated from an economic, technological, environmental and didactic standpoint and adapted accordingly.

#### A new occupation emerges

When a professional organisation wishes to introduce a VET programme for a new occupation, it works closely with the other main partners (i.e. the Confederation and the cantons). An important consideration for federal approval is that learners who graduate from a given VET programme will actually be able to find work. Development of a VET programme takes place in accordance with an established workflow.

#### First steps

Before work on the new VET programme can start, fundamental questions must first be answered: Which professional organisation will sponsor the new VET programme? Has the occupational field been clarified? Is there a need for the given occupation on the labour market and are there enough companies within the given branch that are willing to create apprenticeship positions and hire graduates afterwards? Once these questions have been answered, the professional organisation will contact the State Secretariat for Education, Research and Innovation SERI and schedule a planning meeting with all of the partners involved.

#### Competence profile and VET ordinance

The main documents in a given VET programme are the job profile<sup>7</sup>, the overview of all professional competences and the statement of the level of difficulty of the given occupation. The VET ordinance includes legal aspects<sup>8</sup> applying to apprenticeship training in dual-track VET programmes as well as the various requirements for practical training within school-based VET programmes.

#### Consultation and approval

SERI examines the VET ordinance and training plan for quality control purposes. After examination has been completed and any necessary adjustments have been made, SERI organises a consultation session with cantonal agencies, federal agencies and other interested parties. SERI will then take the results of this consultation into account and make whatever changes are needed to the VET ordinance and training plan. Any unresolved issues will be settled in an editing meeting of the various partners. SERI will then issue the VET ordinance and approve the training plan.

#### Implementation and subsequent modification

The committee for occupation development and quality that is responsible for the given occupation will then meet at least every five years to re-examine the VET ordinance and training plan in view of economic, technological, environmental and didactic developments. Measures may then be taken on this basis to adapt the VET programme accordingly. The Swiss Federal Institute for Vocational Education and Training (SFIVET) has a federal mandate to provide support to the sponsoring professional organisation and the cantons.

<sup>&</sup>lt;sup>7</sup> The job profile describes what the person does in this occupation, his/her field of work and the importance that the occupation has within society.

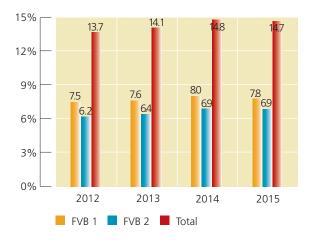
<sup>8</sup> Subject, duration, objectives and allocation of training content to learning locations, qualification procedure, qualifications and title.



### Federal vocational baccalaureate

The Federal Vocational Baccalaureate (FVB) gives Federal VET Diploma holders further, more general education and entitles them to enrol in a Swiss university of applied sciences (UAS). If an FVB holder also takes the University Aptitude Test (UAT), then enrolment in a cantonal university or one of Switzerland's two federal institutes of technology is also possible.

#### Federal Vocational Baccalaureate uptake9



The preparatory course for the FVB examination is generally taught by vocational schools. There are two options: either to take this preparatory course alongside the normal training regimen for the given VET programme (FVB 1) or to do so after completion of the VET programme (FVB 2). In recent years, the proportion of VET graduates who also obtain the FVB has been increasing steadily. The number of young people who take the preparatory course for the FVB examination after graduation (FVB 2) has risen at a faster rate than the number of young people who choose the FVB 1 option. The Confederation, the cantons and professional organisations are working closely together to consolidate the Federal Vocational Baccalaureate, particularly FVB 1.

### From federal vocational baccalaureate to a university of applied sciences

UASs offer a combination of theory and practical training at tertiary level. Study programmes lead to a Bachelor's degree or a Master's degree. At Bachelor's degree level, UASs impart general theory and research findings as well as the competences needed to work in a given occupation. At Master's degree level, UASs provide students with in-depth, specialised knowledge, preparing them for a more advanced qualification in their field. Holders of the FVB can generally enrol in a UAS without taking an exam.

#### Links

#### Information about the FVB:

⇒ www.sbfi.admin.ch/bm

#### Information about study programmes at UASs:

⇒ www.sbfi.admin.ch/fhs

#### **Study programmes:**

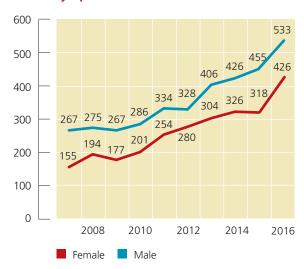
⇒ www.studyprogrammes.ch



### Five orientations for federal vocational baccalaureate and corresponding fields of study at universities of applied sciences

Orientation of FVB	Corresponding fields of study at UAS <sup>10</sup>
Engineering, architecture, life sciences	Engineering and information technology Architecture, construction and planning Chemistry and life sciences
Nature, agriculture and food	Agriculture and forestry
Business and services	Business and services
Creativity and art	Design
Health and social care	Health Social work

#### University Aptitude Test<sup>11</sup>



The University Aptitude Test (UAT), which may be taken by holders of the Federal Vocational Baccalaureate, enables one to enrol in any study programme at a Swiss university (i.e. cantonal universities and the two federal institutes of technology). The preparatory course for the UAT takes a year. This option has become increasingly popular in recent years.

## Link Information about UAT: ⇒ www.sbfi.admin.ch/passerelle\_d

17

11 Federal Statistical Office (2017e).

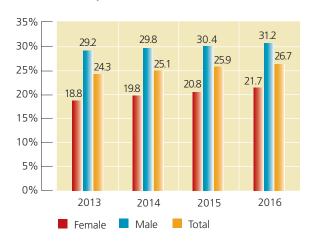
<sup>&</sup>lt;sup>10</sup> Fields of study that are unrelated to any VET programme are not listed (sports, music, theatre and other arts, applied linguistics, applied psychology).



### Professional education

Swiss tertiary-level education is comprised of professional education, universities of applied sciences (UASs) and cantonal universities/federal institutes of technology. The professional education sector places great emphasis on the actual skills used in a given profession.

#### Transitions to professional education<sup>12</sup>



Professional education imparts competences needed to handle challenging technical or managerial activities and provides the labour market with highly skilled workers. Admission to professional education is normally open to holders of a Federal VET Diploma or equivalent upper-secondary level qualifications. The proportion of holders of vocational qualifications who, after some years of work experience, decide to pursue professional qualifications has increased slightly in recent years.

#### Pathway leading to professional qualifications<sup>13</sup>



Most people obtain their professional qualification after having passed a federal examination. The federally regulated professional education sector accounted for over 90% of the qualifications awarded in Switzerland in 2016.

#### Link

List of all federally recognised vocational and professional qualifications:

⇒ www.bvz.admin.ch

Qualification awarded by colleges of higher education

Federal Diploma of Higher Education

Advanced Federal Diploma of Higher Education

Other Total

<sup>&</sup>lt;sup>12</sup> Federal Statistical Office (2017f).

<sup>&</sup>lt;sup>13</sup> Federal Statistical Office (2017a).



### The ten most frequently taken federal examinations (level 1) in 2016<sup>14</sup>

All professions combined	Total
Human resources specialist	949
Technical sales specialist	793
Police officer	756
Marketing specialist	634
Finance and accountancy specialist	592
Training specialist	504
Social insurance specialist	485
Sales representative	354
Property manager	330
Retail specialist	282

### The ten most frequently taken federal examinations (level 2) in 2016<sup>14</sup>

All professions combined	Total
Certified complementary medicine therapist*	619
Certified auditor	208
Master farmer	166
Electrician	158
Sales manager	143
Certified accountant	125
Certified naturopath	107
Certified sports school director	90
Certified tax advisor	80
Certified real estate fiduciary	70

<sup>\* 2016</sup> High number due to recognition of continuing education and training

### Top ten occupational fields chosen by adults\* in 2016<sup>14</sup>

Occupational field	Total
Nursing	1587
Business administration	949
Social pedagogy	541
Business processes	494
Hotels, restaurants and catering Civil engineering	385
Mechanical engineering	361
Child care	317
Business informatics	299
Information technology	294
Electricity and power	273

<sup>\*</sup>Courses recognised under the old and new legislation are aggregated.

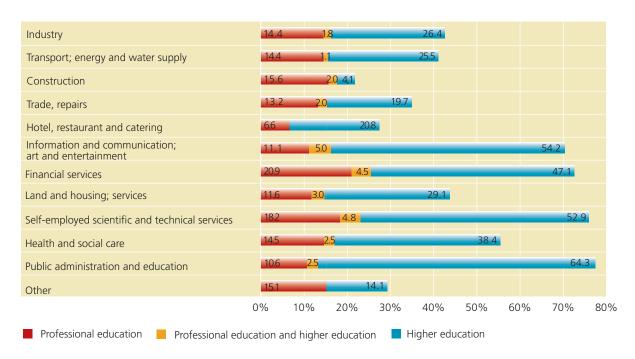
In Switzerland, there are federal examinations at level 1 for around 220 different professions and at level 2 for around 170 different professions. Both levels combined, the ten most frequently taken examinations accounted for 40% of all federal examinations taken in 2016.

Study programmes are offered at colleges of higher education for around 450 different occupations. The ten most frequently completed study programmes accounted for over 60% of all study programmes completed in 2016.

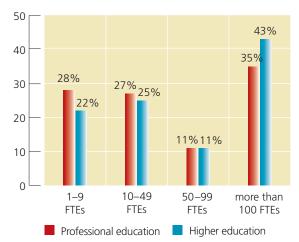
<sup>&</sup>lt;sup>14</sup> Federal Statistical Office (2017a).



#### Completed tertiary-level training by economic branch in 2016<sup>15</sup>



#### Distribution of holders of tertiary-level qualifications by company size 2016<sup>16</sup>



FTE= Full-time equivalent

Holders of tertiary-level professional qualifications are more likely to work for small-sized companies on a contractual basis, whereas holders of higher education qualifications tend to work for larger-sized companies.

In terms of employment position, there does not seem to be any significant difference between holders of professional qualifications and holders of higher education qualifications.

<sup>&</sup>lt;sup>15</sup> Federal Statistical Office (2017b).

<sup>&</sup>lt;sup>16</sup> Federal Statistical Office (2017j).



#### Income from employment by vocational/professional qualification<sup>17</sup>



Professional education offers a good return on investment for qualification holders. Most students enrolling in preparatory courses for federal examinations or study programmes at colleges of higher education do so on a part-time basis while working and therefore already earn an income that increases once they obtain their tertiary-level professional qualification. Holders of professional qualifications earn about one third more than holders of upper-secondary level vocational qualifications.

Index (100 = compulsory education)

- Tertiary-level professional education
- Upper-secondary level VET

### Transition from professional education to a university of applied sciences

It is possible to transition from professional education to a Swiss university of applied sciences. Depending on the qualifications, holders of professional qualifications may be admitted to a Swiss UAS without having to take an entrance examination or after passing an admissions test.

#### Links

Information about the Swiss professional education sector:

⇒ www.sbfi.admin.ch/hbb

Statistics on Swiss professional education sector:

⇒ www.education-stat.admin.ch ⇒ Bildungssystem Schweiz ⇒ nach Themen ⇒ Abschlüsse

Information about transition to a Swiss university of applied sciences:

⇒ www.swissuniversities.ch/en ⇒ Services ⇒ Zulassung zur FH

<sup>&</sup>lt;sup>17</sup> Federal Statistical Office (2017g).



### Vocational qualifications for adults

In Switzerland, adults may also seek vocational qualifications. Adults may either attend the standard dual-track VET programme leading to a vocational qualification or obtain this qualification through direct admission to the final examination. A third option is to obtain a qualification through the validation of non-formal and informal learning (VNIL).

### Number of vocational qualifications awarded to persons aged 24 and older in 2016<sup>18</sup>

Age	25-29	30-39	40+	Total
Regular VET programme	2 635	899	266	3800
Shortened VET programme	1238	504	333	2075
Direct access to final examination	514	882	768	2164
Validation of non-formal and informal learning	58	159	337	554
Total	4 4 4 5	2 444	1704	8 5 9 3

### Ten most frequently chosen fields for persons aged 24 and older seeking vocational qualifications in 2016<sup>18</sup>

Total occupations	Total
Nursing and obstetrics	1191
Social work and counselling	981
Business administration	944
Civil engineering	775
Wholesale and retail trade	760
Hotels, restaurants and catering	490
Housekeeping services	458
Mechanical engineering and metalworking	408
Plant cultivation and animal breeding	371
Electricity and power	293

### Four established pathways to vocational qualifications

For adults, there are several ways to obtain a Federal VET Certificate or a Federal VET Diploma. The first two pathways to vocational qualifications consist of enrolment in a shortened or standard dual-track VET programme. The other two involve direct admission to the final examination or validation of non-formal and informal learning (VNIL).

### Special conditions for adults with work experience

The shortened dual-track VET programme, direct admission to the final examination and VNIL were all developed specifically for adults who have already gained a certain amount of work experience. Therefore, past knowledge and know-how can be taken into account. For direct admission to the final examination, the person must have at least five years of work experience. While direct admission to the final examination is possible for all occupations, the VNIL option is only available for a limited number of occupations.

#### **Choice of pathway**

Young adults tend to choose the first two options, enrolling either in a shortened or standard dual-track VET programme. Adults aged 25 and older tend to prefer preparation for direct admission to the final examination. VNIL is the preferred option for older adults.



### Swiss VPET funding

The VPET sector is funded by the Confederation, the cantons and professional organisations, each to its own extent. Most of the costs of professional education and job-related CET programmes are borne by companies and private individuals.

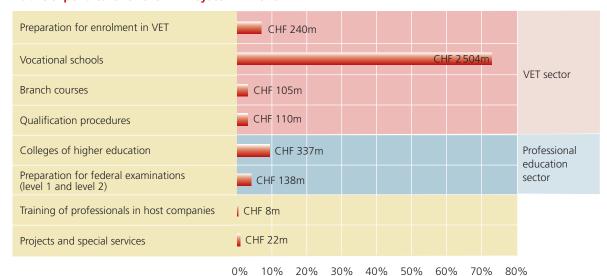
#### **Public sector**

Public expenditure for Switzerland's VPET system stood at around CHF 3.6 billion in 2016. The vast majority of this was spent by the cantons, as they are responsible for implementing VPET. The Confederation contributes one quarter of the total costs of the VPET system. Up to 10% of federal funding is earmarked to promote VPET development projects and specific activities that serve the public interest.

#### **Private sector**

Professional organisations provide both services and funding for the Swiss VPET system: they do the groundwork, run their own training centres and promote specific occupations (VET sector) and professions (professional education sector). For their part, companies help to fund the system by creating apprenticeship positions.

#### Public expenditure for the VPET system in 2016<sup>19</sup>



Share of total public expenditure for VPET system

<sup>&</sup>lt;sup>19</sup> State Secretariat for Education, Research and Innovation (2017).



#### **Funding of VET sector**

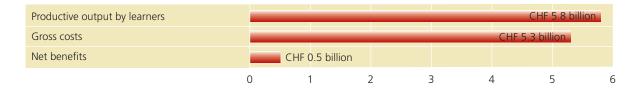
Upper-secondary level vocational education and training (VET) is both publically and privately funded. Public funding comes from the cantons, the Confederation and the communes. Private funding comes from host companies as well as professional organisations. Generally speaking, host companies stand to benefit from taking part in VET programmes. According to a cost/benefit study conducted in 2009, gross costs of involvement in VET amounted to CHF 5.3 billion. This figure was outweighed by the productive output generated by apprentices, which amounted to CHF 5.8 billion.

#### **VPET funds**

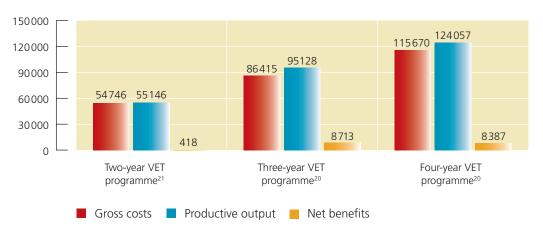
All companies within a given economic branch are required to contribute to a corresponding VPET fund, which is used to cover the costs of activities within the VET sector and professional education sector (e.g. development of training programmes, organising courses and qualification procedures, promotion of specific occupations). The Confederation may declare some VPET funds to be of general interest and therefore mandatory for all companies within a given economic branch.

⇒ www.sbfi.admin.ch/bbfonds\_d

#### Cost/benefit ratio for Swiss companies involved in VET programmes, survey year 2009<sup>20</sup>



#### Costs and benefits by duration of training, in CHF



<sup>&</sup>lt;sup>20</sup> Strupler M. and Wolter S. C. (2012).

<sup>&</sup>lt;sup>21</sup> Fuhrer M. and Schweri J. (2010).



#### **Funding of professional education sector**

Unlike the upper-secondary level VET sector, the tertiary-level professional education sector relies much more heavily on funding from students and employers. Federal examinations in particular and the corresponding preparatory courses are mostly paid for by the private sector. Nevertheless, the public sector contributes substantial funding. In 2016, public expenditure for professional education and job-related continuing education and training (CET) exceeded CHF 475 million.

#### **Federal examinations**

60% to 80% of the costs of conducting federal examinations is paid for by the Confederation. In 2016, this amounted to around CHF 30 million. Most individuals who attend preparatory courses for federal examinations do so on a part-time basis while remaining in employment. These preparatory courses are not regulated by the state. However, from January 2018 50% of the course costs will be subsidised by the Confederation. The remaining half must be met privately (by employers or the students). The amount contributed by employers is agreed upon on a case-per-case basis in discussions with their employees.

#### Links

Information about funding of the professional education sector:

⇒ www.sbfi.admin.ch/bundesbeitraege

Intercantonal Agreement on Funding Contributions for Study Programmes at Colleges of Higher Education (HFSV):

⇒ www.edk.ch ⇒ Arbeiten ⇒ Finanzierungs-Vereinbarungen ⇒ Höhere Fachschulen

#### Colleges of higher education

Since the 2015/2016 school year, public funding for study programmes at Swiss colleges of higher education is provided by the cantons under the terms of an Intercantonal Agreement on Funding Contributions for Study Programmes at Colleges of Higher Education (HFSV). The cantons pay the colleges of higher education lump sum contributions per student up to a maximum of 50% of the average costs of each study programme. When a given study programme is particularly important to the general public (e.g. health), then cantonal contributions can be as high as 90% of the average costs. The remaining costs are covered by tuition fees



### VPET at international level

The internationalisation of education and labour poses challenges for the Swiss system of vocational and professional education and training (VPET). Switzerland has therefore taken active steps at multiple levels to address this phenomenon. With the aim of further strengthening the position of Swiss dual-track VET programmes, the State Secretariat for Education, Research and Innovation (SERI) is taking corresponding measures in coordination with the cantons and professional organisations.

### International cooperation in vocational education and training (IC-VPET)

The main thrust of the strategy for international cooperation in vocational and professional education and training (IC-VPET) is to support the following: international recognition of vocational and professional qualifications, transfer of expertise, maintaining the high quality of the Swiss VPET system within an international context and encouraging the international mobility of those who are active within the VPET system. In addition to these objectives, the strategy also establishes priorities, measures and criteria for IC-VPET.

⇒ www.sbfi.admin.ch/ibbz

⇒ www.ibbz.admin.ch

#### Transfer of expertise

The Swiss VPET system has generated international interest. Switzerland receives foreign delegations, shares its expertise with interested countries in accordance with the IC-VPET strategy and works closely with countries that also have strong dual-track VET systems. Projects and measures pursued by Swiss partners in the area of international cooperation in vocational education and training (IC-VET) qualify for subsidiary support from the State Secretariat for Education, Research and Innovation (SERI).

Scheduled to take place in Winterthur from 6-8 June 2018, the 3rd International Congress on Vocational and Professional Education and Training will serve as a platform for open dialogue and the exchange of good practices between IC-VPET actors.

⇒ www.vpet-congress.ch

#### **EU education programmes**

Switzerland indirectly takes part in EU education and youth programmes (Erasmus+). Among other things, this includes funding for mobility and cooperation activities in the area of VPET.

⇒ www.movetia.ch/en

#### **National Qualifications Framework (NQF VPET)**

The Swiss National Qualifications Framework for Vocational and Professional Qualifications (NQF VPET) makes it easier to compare and appreciate the value of Swiss vocational and professional qualifications at the international level. In the future, all vocational and professional qualifications will be assigned to a level within the NQF VPET. In addition, each VET qualification will be accompanied by a corresponding certificate supplement and each professional education qualification with a corresponding diploma supplement. These documents explain the competences acquired by the qualification holder and will be available in the Swiss national languages and English

⇒ www.ngr-berufsbildung.ch

### Recognition of foreign vocational and professional qualifications

SERI recognises many foreign upper-secondary level vocational and tertiary-level professional qualifications. Recognition makes it easier for holders of foreign qualifications to work in occupations or professions that are



regulated in Switzerland, thereby facilitating integration on the Swiss labour market. In most cases, recognition is based on a comparative analysis of the content and structure of training in the country where the foreign qualification was issued. This is done to determine whether the foreign qualification is equivalent to a Swiss one. Any significant discrepancies can be overcome by means of compensatory measures. SERI works closely with Swiss professional organisations and training institutions, which helps to ensure a high level of acceptance of recognition decisions.

⇒ www.sbfi.admin.ch/diploma

### Pursuing international cooperation in VET through international organisations

Cooperation with international organisations such as the OECD or the EU fosters an understanding of VET at international level. The State Secretariat for Education, Research and Innovation (SERI) represents Switzerland in

various European bodies in matters pertaining to VET. This has enabled Switzerland to present its positions and exchange good practices. This cooperation has led to international VET projects.

- ⇒ www.sbfi.admin.ch/int\_coop\_vet
- ⇒ www.sbfi.admin.ch/oecd

#### SwissSkills, EuroSkills and WorldSkills competitions

Each year, numerous trade associations choose who among their professionals will represent them at the SwissSkills competition, which also serves as the selection round for those who will represent Switzerland at EuroSkills and WorldSkills competitions. WorldSkills 2017 was held in Abu Dhabi, and Switzerland obtained its best ever result since taking part in this global competition. On the agenda in 2018 are SwissSkills 2018, which will again be held in Bern, and EuroSkills, which will take place in Budapest.

⇒ www.swiss-skills.ch

#### **Key figures for international VPET activities**

Exchange and mobility within the VET sector  Approved budget for Swiss participation in EU-sponsored traineeships abroad (Leonardo da Vinci) <sup>23</sup> Number of young people doing traineeships abroad in 2017  Outgoing Incoming	CHF 5.5m 1196 1007 189
Recognition of foreign qualifications  Number of qualifications processed in 2017  Qualifications from EU/EFTA member states  Qualifications from non-EU/EFTA member states	3 500 2 850 650
Swiss performance at last four WorldSkills competitions Abu Dhabi 2017 São Paulo 2015 Leipzig 2013 London 2011 Calgary 2009	2nd place 4th place 2nd place 3rd place 2nd place
Number of countries represented at the International VPET Congress 2016 2014	76 70

 $<sup>^{23}</sup>$  Figures from media release of 7.9.2017 by the national agency Movetia.



### **VPET** research

The Swiss VPET system is an important asset for the Swiss economy and strengthens its international competitiveness. Subsequent development and adaptation of the VPET system to fresh challenges requires knowledge, which can be gained through VPET research.

#### Legal mandate

The Federal Vocational and Professional Education and Training Act (VPETA) states that the Confederation must contribute to the development of the Swiss VPET system through VPET research, among other things. Quality and independence must be assured through qualified research institutes.

#### **Objectives**

The Confederation will continue to support VPET research until a lasting infrastructure is in place that conducts research to an internationally recognised standard. VPET research findings should enable continuous development of the Swiss VPET system. In addition, research findings should produce the knowledge needed to manage Swiss VPET policy. Together with funding of projects aimed at developing the VPET system and support for special services, federal VPET research constitutes a viable means of ensuring innovation within the VPET system.

#### **Support instruments**

The support programme sponsored by the State Secretariat for Education, Research and Innovation (SERI) is comprised of two support instruments: Leading Houses and Individual Projects. These instruments complement one another. The Leading House instrument pursues long-term objectives with the aim of establishing new research structures. Leading Houses focus on clearly defined, relevant research themes. In their respective areas, each Leading House acts as a competence centre. In contrast, Individual Projects pursue shorter-term objectives and generally last for a period of up to four years. With these two instruments, it is possible to conduct both fundamental and applied research in support of the VPET system.

#### Links

#### Information about VPET research:

⇒ www.sbfi.admin.ch/bbforschung\_d

#### Information about support instruments:

- ⇒ www.sbfi.admin.ch/bbforschung
- ⇒ Leading Houses ⇒ Individual Projects



### Useful links

#### Information about VPET from SERI

Up-to-date information about the Swiss VET and professional education sectors on the website of the State Secretariat for Education, Research and Innovation (SERI). 

⇒ www.sbfi.admin.ch

#### **SERI** documentation

Collection of SERI publications on VET and professional education. Mostly available in different languages. 

⇒ www.sbfi.admin.ch/pubbb

#### •

Information portal about campaign to promote the Swiss VPET system.

⇒ www.vetplus.ch

The VPET-campaign

#### **VPET** portal

Cantonal portal with extensive information about the Swiss VPET system.

⇒ www.berufsbildung.ch

#### **VPET lexicon**

Key terms relating to upper-secondary level vocational education and training and tertiary-level professional education along with brief explanations – in German, French, Italian and English.

⇒ www.lex.berufsbildung.ch

#### **Swiss education statistics**

Statistics, publications and interactive statistical tools from the Federal Statistical Office (FSO).

⇒ www.education-stat.admin.ch

### Information about training of vocational school teachers, apprenticeship trainers, branch courses instructors and examiners

⇒ www.sbfi.admin.ch/bbverantwortliche\_d

### Information about how to obtain the host company label

⇒ www.vignette.berufsbildung.ch

#### **VPET-related journal and newsletter**

Range of products for professionals and institutions within the VET and professional education sectors, vocational, educational and career counsellors and labour market authorities.

⇒ www.panorama.ch

#### Swiss education information platform

Swiss education server with information and materials concerning the Swiss education system.

⇒ www.educa.ch/en/

#### **Document server for education**

Electronic repository of documents relating to education, education management, planning, research and development in Switzerland.

⇒ www.edudoc.ch





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#### Orders

www.vetplus.ch

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